

SHORT ARTICLES AND NOTES

NOTE ON THE PSYCHOPATHOLOGY OF GENIUS

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Is genius characterized by mental disorder? Although Lombroso and others who have maintained this thesis are now pretty thoroughly discredited, perhaps the true issue has been clouded by the way in which the question has been put. Since neither genius nor mental disorder is a single entity, would it not be more accurate, and of more practical value, to ask: Are there any kinds of mental achievement which tend to be associated with pathological mental conditions? It may be, of course, that certain conditions, commonly called pathological, actually contribute to certain kinds of achievement. Liabilities to the individual, they may thus become assets to society. Or they may be a result of unnecessary conflicts between the gifted person and his social environment, and, as such, preventable. In either case, the question we have asked has a direct bearing on the education of gifted children.

Statistical evidence on this question is still extremely fragmentary and can be summed up in a few words. Let us, for the moment, lump all pathological conditions together and compare the different types of genius in regard to the amount of "psychopathy" they exhibit.

Havelock Ellis, in his 1030 British men of eminence, found 44 for whom insanity of some kind was reported. Of these, 31 were temporary, doubtful, or occurred only in old age, leaving 13 that were clearly insane for a large part of their lives. Of these 13, 6 were poets, 4 artists, 2 "men of letters," and 1 a business promoter. Taking all of the 44, including the 31 borderline cases, and distributing them among the different varieties of genius as classified by Ellis, we obtain the following ranking:

	"Insane"	Total	Ratio
Artists	7.5	83	.090±.023
Poets	7.5	110	.068±.018
"Men of Letters"	10.0	197	.056±.013
Scientists	4.0	120	.033±.013
Statesmen	4.0	126	.032±.012
Divines	4.0	138	.029±.011
Soldiers and sailors	2.0	83	.024±.013

The probable errors are large, of course, and the most we can say is that the first 3 may tend to be somewhat more psychopathic than the

last 4. There were no "insane" musicians, but the total number of British musicians (15), and of certain other groups, was too small to give significant statistics.

The present writer, in order to check these findings with a different group of subjects, studied the original data collected for Cox's book, *Early Mental Traits of Three Hundred Geniuses*. It amounted to an average of about 12 typewritten pages per man. He found 3 cases of confinement in asylums, for other than senile dementia (Cowper, Comte, and probably Tasso); 3 cases of drug addiction (Coleridge, Musset, and perhaps Haller); 3 cases of suicide (Chatterton, Clive, and Miller); and 4 cases of persistent hallucinations (Bunyan, Savonarola, Swedenborg, and Cardan). These are probably to be considered minimum figures, since the data are very inadequate. They give, curiously enough, 13 names which can be compared with Ellis' 13. The poets lead again with 5 names; there are also 3 religious leaders, 3 scientists, 1 philosopher, and 1 soldier.

The writer also arranged the 300 subjects in rank order, from the ones that exhibited clearly psychopathic traits down to the ones who were apparently extraordinarily sane, exhibiting (in their biographies) none of the little peculiarities and emotional conflicts which the average man may be assumed to possess. He then drew a line arbitrarily at the 75th percentile, so as to cut off the 75 cases nearest the psychopathic end of the distribution. These 75 cases are not to be considered "psychopathic," of course, in the common use of that word; they are simply somewhat less rational and serene than the average of the 300. It can be said, however, that the 75 names include every case for whom there was some reliable evidence of delusions, obsessions, temporary mental incapacity, marked moral instability, extreme melancholy, extreme emotional conflict, and the like, as well as many cases that were less extreme or for which the evidence was open to serious question. The following distribution of the 75 cases, although highly unreliable in regard to individuals, probably has some value in comparing types.

	Number included in 75 cases near- est the psycho- pathic end of the distribution	Total	Ratio
Revolutionary statesmen	5	8	.62±.13
Musicians	5	11	.45±.11
Novelists and dramatists	15	34	.44±.06
Poets	11	26	.42±.07
Religious leaders	9	22	.41±.08

Essayists and controversialists	7	20	.35±.08
Artists	3	13	.23±.09
Philosophers	4	22	.18±.06
Scholars	5	28	.17±.07
Scientists	6	38	.16±.06
Soldier-statesmen	1	11	.09±.07
Soldiers	2	25	.08±.04
Statesmen	2	42	.05±.03
Total	75	300	.25

Another line was then drawn at the 25th percentile, to cut off the 75 most well-balanced cases in a similar way. This group contains none of the revolutionary statesmen, but contains 3% of the novelists and dramatists, 8% of the poets, 18% of the musicians, 18% of the soldier-statesmen, 22% of the scholars, 23% of the philosophers, 24% of the religious leaders, 32% of the essayists, 36% of the soldiers, 38% of the artists, 38% of the statesmen, and 44% of the scientists.

As is to be expected when dealing with such small numbers, the rank order of the types of genius is highly unreliable. The artists, for example, are at the top of the list in the table based on Ellis' data, and below the middle in both lists based on Cox's data. But, in general, it seems that the aesthetic types tend to be more psychopathic than the scientific and practical types. The poets and novelists, in particular, are near the top pretty consistently, while soldiers and statesmen are consistently near the bottom. (Is this possibility due to the fact that the peculiarities of poets and novelists are more likely to be observed?) Perhaps we should expect that the reformer type, represented in revolutionary statesmen, and in Cox's "religious leaders" much more than in Ellis' "divines," would be significantly more psychopathic than the average. In this reformer type would be included such names as Marat, Mirabeau, Robespierre, Mazzini, Lamartine, Rousseau, St. Simon, Comte, Campanella, Calvin, Savonarola, George Fox, Swedenborg, and Bunyan, all of whom are said by some biographer or other to have possessed psychopathic traits.

There is even less evidence on the question as to the kinds of psychopathy associated with great achievement. Lombroso casts his net and drags in everything, from left-handedness and melancholy to precocity and longevity. Ellis mentions an unusual amount of stammering, physical awkwardness, gout, etc., as well as a surprisingly large number of imprisonments. Other writers use the anecdotal method almost exclusively. The only attempt to characterize types of genius statistically is apparently that of Cox, and this was done on a very small scale. Two raters gave each of 100 men selected from the original 300 a score on each of 67 character traits, all supposedly desirable. The scale consisted of scores

from minus 3 to plus 3, zero representing the assumed average of an unselected population. The group as a whole scored above zero in the great majority of the traits, and the same was true of the different types of genius considered separately. But in 2 traits which have a bearing on our question, "absence of occasional liability to extreme depression" and "absence of liability to anger," the group as a whole scored slightly below the assumed average. The group also averaged 1.2 in excitability, which was assumed to be a desirable trait. These 3 facts taken together may indicate that, in so far as psychopathy is to be found in genius at all, one of its forms is likely to be over-excitability. It may also be noted that 10 poets, 5 soldiers, and 12 philosophers all averaged above 2.0 in "introversion," which was also assumed to be a desirable trait.

On the basis of this and other evidence, three questions seem pertinent:

1) Does morbid introversion ever contribute to achievement in the field of imaginative writing? The fact that poets and novelists appear to be distinctly less well-balanced than the average of the other types of genius is interesting in connection with the fact that Cox's 10 poets averaged 2.1 in "introversion." It may be that the poet or novelist sometimes experiences thwarting or conflict in his external life and takes refuge in an inner world of "feeling" and imagination. Some such argument might be made in the cases of Coleridge, Lamb, Cowper, Shelley, Chatterton, Poe, Heine, Leopardi, Musset, Tasso, Herder, Rousseau, Chateaubriand, LaFontaine, Maupassant, Dostoevsky, Andersen, Goldsmith, Charlotte Brontë, George Eliot, and several others.

2) Does emotional excitability sometimes contribute to certain types of genius? It would not be surprising if the men who arouse the strongest emotions in others were often the ones who have the strongest, most unmanageable emotions themselves. This might apply to both the aesthetic and the reformer types, which have been mentioned as being less well-balanced than the others. It might also account for the fact that, in Cox's ratings, the poets, musicians, and revolutionary statesmen all average above 2.0 in "excitability."

3) Does fanatical self-confidence sometimes contribute to achievement in the fields of warfare, religion, and social reform? According to Cox, the one character trait that deserves to rank with intelligence as characteristic of genius is persistence. But persistence implies self-confidence, and self-confidence, when carried to the most extreme degree, becomes megalomania. Examples of extreme self-confidence in genius, and especially in what we have called the "reformer type," are legion: Mohammed, Joan of Arc, Savonarola, Luther, Cromwell, Napoleon, Murat, Robespierre, Marat, William Lloyd Garrison, Harriet Beecher Stowe, Florence Nightingale, Garibaldi, Nietzsche, and countless others.

In conclusion, we may say that there is need for more thorough study of the psychopathology of genius; that the aesthetic and reformer types deserve special attention; and that causal relationships may be looked for in connection with such traits as introversion, emotional excitability, and fanatical self-confidence.

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SOME TRAITS OF CERTAIN PERSONS ASSOCIATED WITH CARNIVAL ATTENDANCE

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The writer, in attempting to compare a carnival crowd with the general population of the same city, was faced with the problem of identifying the members of the carnival crowd. This problem is met in the attempt to study any crowd. The solution in this case has been only partially successful, for, although a definite group has been identified, this group was not the complete carnival group. It was, really, composed of those individuals who owned automobiles which were parked on the carnival grounds. But this group is interesting in itself, and the simple technique here suggested may be more applicable to other crowds than it is to carnival crowds.

The carnival ground under consideration is located 2.4 miles east of down-town Lansing, Michigan, and .4 of a mile beyond the city limits. It adjoins a city trolley line and an important inter-city highway. Ample free-parking space is provided.

At the carnival under study, over half of the crowd arrived by automobiles. Few autos arrived after 10 o'clock and few left before 10:30. During this half hour on Thursday, Friday, and Saturday nights, June 20, 21, and 22, the experimenter jotted down as many of the license numbers of the parked cars as he could. Approximately 150 per evening were obtained. As far as could be determined, these were a random sample of those present.

The persons owning these licenses were determined from the state automobile registration records. The names of the men thus found were sought in the city directory, and all not found there were discarded. One hundred and thirty-four remained. The few women who were found were not included in the study on account of the small number.

The canvass for the directory had been made approximately a year before the date of the carnival and it aimed to include all persons over 15 years of age. The carnival group was composed, therefore, of males